

Facility Name: **Shaw Industries, Inc., Plant 23**  
 City: Dalton  
 County: Whitfield  
 AIRS #: 04-13-313-00074

Application #: TV-13874  
 Date SIP Application Received: July 1, 2002  
 Date Title V Application Received: July 1, 2002  
 Date of Draft Permit:  
 Permit No: 2273-313-0074-V-01-1

Program	Review Engineers	Review Managers
<b>SSPP</b>	Dan Abrams	James Capp
<b>SSCP</b>	N/a	N/a
<b>ISMP</b>	N/a	N/a
<b>Toxics</b>	N/a	N/a

## Introduction

This narrative is being provided to assist the reader in understanding the content of the attached SIP permit to construct and/or draft/proposed operating permit amendment. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit amendment is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit amendment is to identify state and federal air requirements applicable to the modification/construction to be performed at Shaw Industries, Inc., Plant 23 and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit amendment and is presented in the same general order as the permit amendment. It initially describes the facility receiving the permit amendment, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit amendment in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Existing Permits**

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
2273-313-0074-V-01-0	April 27, 2000	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
2273-313-0074-V-01-0	Initial Title V Permit

**B. Regulatory Status****1. PSD/NSR**

This facility is a major source under PSD because it has potential to emit (PTE) of PSD regulated pollutants greater than 250 tpy (it is not one of the 28 named source categories under PSD).

**2. Title V Major Source Status by Pollutant**

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓	✓		
PM <sub>10</sub>	✓			✓
SO <sub>2</sub>	✓	✓		
VOC	✓			✓
NO <sub>x</sub>	✓	✓		
CO	✓			✓
TRS				
H <sub>2</sub> S				
Individual HAP	✓			✓
Total HAPs	✓			✓

## II. Proposed Modification

### A. Description of Modification

Shaw Industries, Inc. agreed to Consent Order No. EPD-AQC-1877 for prior PSD violations at other Shaw Plants. In this Consent Order, Shaw agreed to lower the allowable sulfur content of the fuel oil burned in their boilers at several of Shaw's plants from 2.5% to 1.8%, including Plant 23.

### B. Emissions Change

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
Particulate Matter	Yes	0	0
PM <sub>10</sub>	Yes	0	0
SO <sub>2</sub>	Yes	0	0
VOC	Yes	0	0
NO <sub>x</sub>	Yes	0	0
CO	Yes	0	0
TRS	No	0	0
H <sub>2</sub> S	No	0	0
Individual HAP	Yes	0	0
Total HAPs	Yes	0	0

### C. PSD/NSR Applicability

This modification will not cause a PSD review to occur.

**IV. Regulated Equipment Requirements****A. Brief Process Description**

Shaw Plant 23 is a typical carpet-manufacturing site, with tufting, continuous dyeing (source codes CD01-02), and SBR latex coating (source code LC01). Processed yarn is tufted into greige goods. These greige goods are then dyed in a continuous process. Once the greige goods have been dyed, they are coated with an adhesive backing that adds durability. During this process, the yarn fibers are sheared for consistent length. At the end of this process the finished carpet is inspected and cut to customer specific lengths. All in-line dryers and curing ovens are heated directly by burning natural gas at low fire conditions. Steam for the continuous dyeing operations is provided by three small boilers two 33 MMBtu (source codes BL01 and BL02), and a 35 MMBtu (source code BL03). All three steam-generating boilers are capable of firing on natural gas, and or No. 6 fuel oil.

**B. Equipment List for the Process**

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BL01	Boiler #1	GA Rule 391-3-1-.02(2)(d)1(ii) GA Rule 391-3-1-.02(2)(b)1 GA Rule 391-3-1-.02(2)(g)2	3.4.6	N/a	N/a
BL02	Boiler #2	GA Rule 391-3-1-.02(2)(d)1(ii) GA Rule 391-3-1-.02(2)(b)1 GA Rule 391-3-1-.02(2)(g)2	3.4.6	N/a	N/a
BL03	Boiler #3	GA Rule 391-3-1-.02(2)(d)3 GA Rule 391-3-1-.02(2)(d)2(ii) GA Rule 391-3-1-.02(2)(g)2	3.4.6	N/a	N/a

**C. Equipment & Rule Applicability****Emission and Operating Caps –**

Not applicable

**Applicable Rules and Regulations -**

Not applicable

**D. Compliance Status**

Not Applicable

**E. Operational Flexibility**

Not Applicable

## F. Permit Condition

Condition 3.4.6 was modified to reflect the lower sulfur content of 1.8%, by weight.

Condition 5.2.9.b.iii was modified to reflect the change in the reportable exceedances for the change in the sulfur content allowable.

Condition 5.3.1 was changed to correct the typographical error contained in the original permit.

**Addendum to Narrative**

The 45-day review period ended on September 26, 2002 and there were no comments received from the Company or from EPA. Therefore, no changes were made to the permit or narrative.